

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

1. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401 - 7671q.

2. Section 86.1 is amended by adding paragraph (b)(6) to read as follows:

§86.1 Reference materials.

* * * * *

(b) * * *

(6) NIST material. The following table lists material from the National Institute of Standards and Technology that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the sections of this part where we reference it. Anyone may purchase copies of these materials from the Government Printing Office, Washington, DC 20402 or download them from the Internet at <http://physics.nist.gov/Pubs/SP811/>.

Document number and name	Part 86 reference
NIST Special Publication 811, Guide for the Use of the International System of Units (SI), 1995 Edition.	86.1901

Subpart N - [Amended]

3. A new §86.1375-2007 is added to read as follows:

§86.1375-2007 Equipment Specifications for Field Testing

For field testing conducted pursuant to the requirements of this part, including field testing conducted to measure emissions under Not-To-Exceed test procedures, use the test procedures and equipment specified in 40 CFR part 1065.

4. A new subpart T is added to read as follows:

Subpart T— Manufacturer-Run In-Use Testing Program for Heavy-Duty Diesel Engines

Sec.

86.1901 What testing requirements apply to my engines that have gone into service?

86.1905 How does this program work?

86.1908 How must I select and screen my in-use engines?

86.1910 How must I prepare and test my in-use engines?

86.1912 How do I determine whether an engine meets the vehicle-pass criteria?

86.1915 What are the requirements for Phase 1 and Phase 2 testing?

86.1917 How does in-use testing under this subpart relate to the emission-related warranty in Section 207(a)(1) of the Clean Air Act?

86.1920 What in-use testing information must I report to EPA?

86.1925 What records must I keep?

86.1930 What special provisions apply in 2005 and 2006?

Appendix I to Subpart T— Sample Graphical Summary of NTE Emission Results

§86.1901 What testing requirements apply to my engines that have gone into service?

(a) If you manufacture diesel heavy-duty engines above 8500 lbs. GVWR that are subject to engine-based exhaust emission standards under this part, you must test them starting in calendar year 2005 as described in this subpart. See §86.1930 for special provisions that apply to engines manufactured before model year 2007.

(b) We may void your certificate of conformity for an engine family if you do not meet your obligations under this subpart. We may also void individual tests and require you to retest those vehicles or take other appropriate measures in instances where you have not performed the testing in accordance with the requirements described in this subpart.

(c) Independent of your responsibility to test in-use engines under this subpart, we may choose to do our own testing of your in-use engines.

(d) In this subpart, the term “you” refers to the certificate-holder for any engines subject to the requirements of this subpart.

(e) In this subpart, round means to round numbers according to NIST Special Publication 811 (incorporated by reference in §86.1).

§86.1905 How does this program work?

(a) You must test in-use engines from the families we select. We may select the following number of engine families for testing, except as specified in paragraph (b) of this section:

(1) We may select up to 25 percent of your engine families in any calendar year, calculated by dividing the number of engine families you certified in the model year corresponding to the calendar year by four and rounding to the nearest whole number. We will consider only engine families with annual U.S.-directed production volumes above 1,500 units in calculating the number of engine families subject to testing each calendar year under the annual 25 percent engine family limit. In addition, for model year 2007 through 2009, identical engine families that are split into two families under §86.007-15(m)(9) will count as only one engine family. If you have only three or fewer families that each exceed an annual U.S.-directed production volume of 1,500 units, or if you have no engine families above this limit, we may select one engine family per calendar year for testing.

(2) Over any four-year period, we will not select more than the average number of engine families that you have certified over that four-year period (the model year when the selection is made and the preceding three model years), based on rounding the average value to the nearest whole number.

(b) If there is clear evidence of a nonconformity with regard to an engine family, we may select that engine family without counting it as a selected engine family under paragraph (a) of this section. We will consult with you in reaching a conclusion whether clear evidence of a nonconformity exists for any engine family. In general, there is

clear evidence of a nonconformity regarding an engine family under this subpart in any of the following cases:

(1) The engine family is a carry-over from an engine family you tested under this subpart and was subsequently remedied based at least in part on the Phase 1 or Phase 2 testing outcomes described in §86.1915.

(2) The engine family is a carry-over from an engine family that was remedied based on an EPA in-use testing program.

(c) We may select any individual engine family for testing, regardless of its production volume, as long as we do not select more than the number of engine families described in paragraph (a) of this section. We may select an engine family from the current model year or any previous model year, except that beginning in calendar year 2007, we will not select any engine families from model years before 2007.

(d) You must complete all the required testing and reporting under this subpart within 18 months after we direct you to test a particular engine family. We will typically select engine families for testing and notify you in writing by June 1 of the applicable calendar year. You may ask for up to six months longer to complete Phase 2 testing if you can justify the need for more time.

(e) If you make a good-faith effort to access enough test vehicles to complete Phase 1 or Phase 2 testing requirements under this subpart for an engine family, but are unable to do so, you must ask us either to modify the testing requirements for the selected engine family or, in the case of Phase 1 testing, to select a different engine family.

(f) After you complete the in-use testing requirements for an engine family that we selected for testing in a given calendar year, we may select that same family in a later year to evaluate the engine family's compliance closer to the end of its useful life. This would count as an additional engine-family selection under paragraph (a) of this section, except as described in paragraph (b) of this section.

(g) For any communication related to this subpart, contact the Engine Programs Group Manager (6405-J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

§86.1908 How must I select and screen my in-use engines?

(a) Once we direct you to do testing under this subpart, you must make arrangements to select test vehicles and engines that meet the following criteria:

(1) The engines must be representative of the engine family.

(2) The usage of the vehicles must be representative of typical usage for the vehicles' particular application.

(3) The vehicles come from at least two independent sources.

(4) The engines have been properly maintained and used.

(5) The engines have not been tampered with, misfueled, rebuilt or undergone major repair that could be expected to affect emissions.

(6) The vehicles are likely to operate for at least three hours (excluding idle) over a complete shift-day, as described in §86.1910(g).

(7) The vehicles have not exceeded the applicable useful life, in miles or years (see subpart A of this part); you may otherwise not exclude engines from testing based on their age or mileage.

(b) You must send us a general plan describing how you will procure and select vehicles for in-use testing. Your general plan should apply to any engine family that could be selected for testing under this subpart. Your plan should include the range of activities you intend to use to identify, locate, and screen vehicles for in-use testing. Do not start testing until we approve your general plan. Notify us promptly in writing if you deviate from the general plan we have approved. Deviations are deemed accepted if we either notify you of our acceptance or if we do not contact

you within 21 calendar days of receipt to disapprove or express concerns with your deviation. Do all the following things in your general plan:

(1) Describe how you will recruit vehicles and explain whether this may result in an emphasis on testing engines with a particular type of driving route or from a particular geographic area. Describe any preference for a particular driving route or geographic area. Treat any situation where there is an actual emphasis on a particular engine configuration, application, or service class as a deviation from your general plan. If you will rely on a business relationship to recruit vehicles—such as with vehicle manufacturers or fleet operators—identify these other companies and describe how you will work together to recruit vehicles.

(2) Describe the methods you will use to gather available information about whether vehicles and engines meet the acceptance criteria described in paragraph (a) of this section. Describe any quantitative thresholds you will use to accept individual vehicles and engines for testing.

(c) You must keep any records of a vehicle's maintenance and use history you obtain from the owner or operator, as required by §86.1925. You must report the engine's maintenance and use history and information related to the OBD system, as described in §86.1920. The presence of an OBD trouble code or an illuminated MIL is not automatic grounds for rejecting a candidate vehicle under this subpart.

(d) You must notify us before rejecting a candidate vehicle for reasons other than failing to meet the acceptance criteria in paragraph (a) of this section and the quantitative thresholds in paragraph (b)(2) of this section. A candidate vehicle is any prospective vehicle you have identified to potentially fulfill your testing requirements under this subpart. Include your reasons for rejecting each vehicle. We may allow you to replace the rejected vehicle with another candidate vehicle to meet your testing requirements for the specific engine family.

(e) You must report when, how, and why you reject candidate vehicles, as described in §86.1920.

§86.1910 How must I prepare and test my in-use engines?

(a) You must limit maintenance to what is in the owners manual for engines with that amount of service and age. For anything we consider an adjustable parameter (see §86.094-21(b)(1)(ii) and §86.094-22(e)), you may adjust that parameter only if it is outside of its adjustable range. You must then set the adjustable parameter to the mid-point of its adjustable range, unless we approve your request to do otherwise. You must receive permission from us before adjusting anything not considered to be an adjustable parameter. You must keep records of all maintenance and adjustments, as required by §86.1925. You must send us these records, as described in §86.1920(a)(3)(x), unless we instruct you not to send them.

(b) The presence of an OBD trouble code or an illuminated MIL is not automatic grounds for eliminating a vehicle that has been accepted for in-use testing under this subpart. This includes an activated OBD trouble code or illuminated MIL that you find when you first observe the vehicle. The presence of an OBD trouble code or an illuminated MIL is also not grounds for automatically aborting or voiding a test.

(1) You must address activated OBD trouble codes and illuminated MILs that occur before testing as follows:

(i) You may continue to prepare and test the vehicle without remedying the cause of the OBD code or MIL illumination.

(ii) If you wish to remedy the cause of an OBD trouble code or illuminated MIL before testing, you must first get our approval.

(iii) We will generally allow you to remedy problems that cause OBD trouble codes or MIL illumination if the problem is related to scheduled maintenance that you specify in the owner's manual. If we allow you to remedy these problems, you may also clear the trouble codes and turn off the MIL.

- (iv) We will generally not allow you to remedy problems that cause OBD trouble codes or MIL illumination if the problem is related to a malfunctioning component, an assembly within the emission-control system, or an unknown cause. In these cases, you may also not clear the trouble codes or turn off the MIL.
- (2) You must complete any test in which an activated OBD trouble code or illuminated MIL is discovered after emission testing has started.
- (3) If we do not allow you to remedy problems that cause OBD trouble codes or MIL illumination before testing, you may remedy the problems after testing, clear the trouble codes and turn off the MIL, and retest the vehicle. If you retest an engine under this paragraph (b)(3), we will consider the results of both tests, as follows:
- (i) We will use the initial test results conducted before remedying the cause of the OBD code or MIL illumination to determine whether the vehicle meets the vehicle-pass criteria described in §86.1912.
- (ii) We will consider the results of the retest conducted after remedying the cause of the OBD code or MIL illumination in determining an appropriate course of action to address the possible outcomes described in §86.1915(b)(2) or §86.1915(b)(3).
- (c) You must test the selected engines while they remain installed in the vehicle. Use portable emission-sampling equipment and field-testing procedures referenced in §86.1375 and diesel fuel specified in §86.1313 for the applicable model year. Measure emissions of THC, CO, NO_x, PM, O₂, and CO₂.
- (d) For Phase 1 testing, you must test the engine under conditions reasonably expected to be encountered during normal vehicle operation and use consistent with the general NTE requirements described in §86.1370-2007(a). For the purposes of this subpart, normal operation and use would generally include consideration of the vehicle's normal routes and loads (including auxiliary loads such as air conditioning in the cab), normal ambient conditions, and the normal driver.
- (e) For Phase 2 testing, we may give specific directions, as described in §86.1915(c)(2).
- (f) Once an engine is set up for testing, test the engine for at least one shift-day. To complete a shift-day's worth of testing, start sampling at the beginning of a shift and continue sampling for the whole shift. A shift-day is the period of a normal workday for an individual employee. If the first shift-day of testing does not involve at least 3 hours of accumulated non-idle operation, repeat the testing for a second shift-day. If the second shift-day of testing also does not result in least 3 hours of accumulated non-idle operation, you may choose whether or not to continue testing with that vehicle. If after 2 shift-days you discontinue testing before accumulating 3 hours of non-idle operation, evaluate the valid NTE samples as described in §86.1912 and include the data in the reporting and recordkeeping requirements specified in §§86.1920 and 1925. Count the engine toward meeting your testing requirements under this subpart and use the data for deciding whether additional engines must be tested under the applicable Phase 1 or Phase 2 test plan.
- (g) You may count a vehicle as meeting the vehicle-pass criteria described in §86.1912 if two shift-days of testing does not generate a single valid NTE sampling event, as described in §86.1912 (c). Count the engine towards meeting your testing requirements under this subpart.
- (h) You may ask us to waive measurement of particular pollutants if you can show that in-use testing for such pollutants is not necessary.

§86.1912 How do I determine whether an engine meets the vehicle-pass criteria?

In general, the average emissions for each regulated pollutant must remain at or below the NTE threshold in paragraph (a) of this section for at least 90 percent of the valid NTE sampling events, as defined in paragraph (b) of

this section. For 2007 through 2009 model year engines, the average emissions from every NTE sampling event must also remain below the NTE thresholds in paragraph (f)(2) of this section. Perform the following steps to determine whether an engine meets the vehicle-pass criteria:

(a) Determine the NTE threshold for each pollutant subject to an NTE standard by adding all three of the following terms and rounding the result to the same number of decimal places as the applicable NTE standard:

- (1) The applicable NTE standard.
- (2) The in-use compliance testing margin specified in §86.007-11(h), if any.
- (3) An accuracy margin for portable in-use equipment equal to 0.05 times the sum of the terms in paragraphs (a)(1) and (2) of this section.

(b) For the purposes of this subpart, a valid NTE sampling event consists of at least 30 seconds of continuous operation in the NTE control area. An NTE event begins when the engine starts to operate in the NTE control area and continues as long as engine operation remains in this area (see §86.1370). When determining a valid NTE sampling event, exclude all engine operation in approved NTE carve-outs under §86.1370-2007(b)(6) and any approved NTE deficiencies under §86.007(a)(4)(iv). Exclude any portion of a sampling event that would otherwise exceed the 5.0 percent limit for the time-weighted carve-out defined in §86.1370-2007(b)(7). For EGR-equipped engines, exclude any operation that occurs during the cold-temperature operation defined by the equations in §86.1370-2007(f)(1).

(c) Calculate the average emission level for each pollutant over each valid NTE sampling event (E_i^{ave} in g/bhp-hr) by dividing the mass of emissions (grams) by the work done during that period of operation (brake horsepower-hour). Round the resulting value to the same number of decimal places as the applicable NTE threshold. Calculate the average emission level as follows:

$$E_i^{ave} = \frac{\sum_{j=1}^t E_j}{\sum_{j=1}^t W_j}$$

Where:

- E_j = an individual emissions measurement at measurement interval j within sampling event I (g),
- w_j = an individual measurement of work output (bhp-hr) at measurement interval j within sampling event i , and
- t = the duration of the NTE sampling event I (sec).

(d) Calculate a time-weighted vehicle-pass ratio (R_{pass}). To do this, first sum the time from each valid NTE sampling event whose average emission level is at or below the NTE threshold for any pollutant, then divide this value by the sum of the engine operating time from all valid NTE samples. Round the resulting vehicle-pass ratio to two decimal places.

(1) Calculate the time-weighted vehicle-pass ratio as follows:

$$R_{pass} = \frac{\sum_{m=1}^{n_{pass}} t}{\sum_{k=1}^{n_{total}} t}$$

Where:

n_{pass} = the number of sampling events for which the average emission level is at or below the NTE threshold, and

n_{total} = the total number of valid sampling events.

(2) For both the numerator and the denominator of the vehicle-pass ratio, use the smallest of the following values for determining the duration of any NTE sampling event:

(i) The measured time of operation in the NTE control area for that NTE sampling event.

(ii) 600 seconds.

(iii) 10 times the length of the shortest valid NTE sample for all testing with that engine.

(e) The following example illustrates how to select the duration of NTE sampling events for calculations, as described in paragraph (d) of this section:

NTE sample	Duration of NTE sample (seconds)	Duration Limit Applied?	Duration used in calculations (seconds)
1	45	No	45
2	168	No	168
3	605	Yes. Use 10 times shortest valid NTE.	450
4	490	Yes. Use 10 times shortest valid NTE.	450
5	65	No	65

(f) Engines meet the vehicle-pass criteria under this section if they meet both of the following criteria:

(1) The vehicle-pass ratio calculated according to paragraph (d) of this section must be at least 0.90.

(2) For model year 2007 through 2009 engines, emission levels from all valid NTE sampling events must be less than 2.0 times the NTE thresholds calculated according to paragraph (b) of this section for all pollutants, except that engines certified to a NO_x FEL at or below 0.50 g/bhp-hr may meet the vehicle-pass criteria for NO_x if measured NO_x emissions from all valid NTE samples are less than either 2.0 times the NTE threshold for NO_x or 2.0 g/bhp-hr.

§86.1915 What are the requirements for Phase 1 and Phase 2 testing?

For all selected engine families, you must do the following:

(a) To determine the number of engines you must test from each selected engine family under Phase 1 testing, use the following criteria:

(1) Start by measuring emissions from five engines using the procedures described in §86.1375. If all five engines comply fully with the vehicle-pass criteria in §86.1912 for all pollutants, you may stop testing. This completes your testing requirements under this subpart for the applicable calendar year for that engine family.

(2) If one of the engines tested under paragraph (a)(1) of this section fails to comply fully with the vehicle-pass criteria in §86.1912 for one or more pollutants, test one more engine. If this additional engine complies fully

with the vehicle-pass criteria in §86.1912, you may stop testing. This completes your testing requirements under this subpart for the applicable calendar year for that engine family.

(3) If your testing results under paragraphs (a)(1) and (2) of this section do not satisfy the criteria for completing your testing requirements under those paragraphs, test four additional engines so you have tested a total of ten engines.

(b) For situations where a total of ten engines must be tested under paragraph (a)(3) of this section, the results of Phase 1 testing lead to the following outcomes:

(1) If at least eight of the ten engines comply fully with the vehicle-pass criteria in §86.1912 for all pollutants, you may stop testing. This completes your testing requirements under this subpart for the applicable calendar year for that engine family.

(2) If six or seven vehicles from the Phase 1 sample of test vehicles comply fully with the vehicle-pass criteria in §86.1912 for all pollutants, then you must engage in follow-up discussions with us to determine whether any further testing (including Phase 2 testing), data submissions, or other actions may be warranted.

(3) If fewer than six of the ten engines tested under paragraph (a) of this section comply fully with the vehicle-pass criteria in §86.1912 for all pollutants, we may require you to initiate Phase 2 testing, as described in paragraph (c) of this section.

(4) You may under any circumstances elect to conduct Phase 2 testing following the completion of Phase 1 testing. All the provisions of paragraph (c) of this section apply to this Phase 2 testing.

(c) If you perform Phase 2 testing for any reason, test your engines as follows:

(1) You must test ten engines using the test procedures described in §86.1375-2007, unless we require you to test fewer vehicles.

(2) We may give you any of the following additional directions in selecting and testing engines:

(i) We may require you to select a certain subset of your engine family. This may include, for example, engines within a specific power range, engines used in particular applications, or engines installed in vehicles from a particular manufacturer.

(ii) We may direct you to test engines in a way that simulates the type of driving and ambient conditions associated with high emissions experienced during Phase 1 testing.

(iii) We may direct you to test engines in a specific state or any number of contiguous states.

(iv) We may direct you to select engines from the same sources used for previous testing, or from different sources.

(v) We may require that you complete your testing and reporting under Phase 2 within a certain period. This period may not be shorter than three months and must allow a reasonable amount of time to identify and test enough vehicles.

§86.1917 How does in-use testing under this subpart relate to the emission-related warranty in Section 207(a)(1) of the Clean Air Act?

(a) An exceedance of the NTE found through the in-use testing program under this subpart is not by itself sufficient to show a breach of warranty under Clean Air Act section 207(a)(1) (42 U.S.C. 7541(a)(1)). A breach of warranty would also require one of the following things:

(1) That, at the time of sale, the engine or vehicle was designed, built, and equipped in a manner that does not conform in all material respects reasonably related to emission controls to the engine as described in the application for certification and covered by the certificate; or

(2) A defect in materials or workmanship of a component causes the vehicle or engine to fail to conform to the applicable regulations for its useful life.

(b) To the extent that in-use NTE testing does not reveal such a material deficiency at the time of sale in the design or manufacture of an engine compared with the certified engine, or a defect in the materials and workmanship of a component or part, test results showing an exceedence of the NTE by itself would not show a breach of the warranty under 42 U.S.C. 7541(a)(1).

§86.1920 What in-use testing information must I report to EPA?

(a) Within 30 days after the end of each calendar quarter, send us reports containing the test data from each engine for which testing was completed during the calendar quarter. Alternatively, you may separately send us the test data within 30 days after you complete testing for an engine. Once you send us information under this section, you need not send that information again in later reports. Prepare your test reports as follows:

- (1) For each engine family, describe how you recruited vehicles. Describe how you used any criteria or thresholds to narrow your search or to screen individual vehicles.
- (2) Include a summary of the candidate vehicles you have rejected and the reasons you rejected them, whether you base the rejection on the criteria in §86.1908(a) or anything else.
- (3) For the test vehicle, include the following background information:
 - (i) The EPA engine-family designation, and the engine's model number, total displacement, and power rating.
 - (ii) The applicable test phase (Phase 1 or Phase 2).
 - (iii) The date EPA selected the engine family for testing.
 - (iv) The vehicle's make and model and the year it was built.
 - (v) The vehicle's type or application (such as delivery, line haul, or dump truck). Also, identify the type of trailer, if applicable.
 - (vi) The vehicle owner's name, address, phone number, and e-mail address.
 - (vii) The vehicle's maintenance and use history. Compare this information with the criteria you establish in your test plan under §86.1908(b).
 - (viii) The known status history of the vehicle's OBD system and any actions the owner or operator took to address OBD trouble codes or MIL illumination over the vehicle's lifetime.
 - (ix) Any OBD codes or MIL illumination that occur after you accept the vehicle for in-use testing under this subpart.
 - (x) Any steps you take to maintain, adjust, modify, or repair the vehicle or its engine to prepare for testing, including actions to address OBD trouble codes or MIL illumination.
- (4) For each test, include the following data and measurements:
 - (i) The date and time of testing, and the test number.
 - (ii) Shift-days of testing (see §86.1910 (g)), duration of testing, and the total hours of non-idle operation.
 - (iii) Route and location of testing. You may base this description on the output from a global-positioning system.
 - (iv) The steps you took to ensure that vehicle operation during testing was consistent with normal operation and use, as described in §86.1910(e).
 - (v) Fuel specifications, if available.
 - (vi) The vehicle's mileage at the start of the test. Include the engine's total lifetime hours of operation, if

available.

(vii) Ambient temperature, dewpoint, and barometric pressure at the start and finish of each valid NTE event.

(viii) The number of valid NTE events (see §86.1912(c)), and the percent of measured operating time in the NTE zone (both for valid NTE events and for instantaneous excursions).

(ix) Average emissions for each pollutant over each valid NTE event. See Appendix I of this subpart for an example of graphically summarizing NTE emission results.

(x) Exhaust-flow measurements.

(xi) Vehicle-pass ratio (see §86.1912(d)).

(xii) Recorded one-hertz test data for all the parameters specified in 40 CFR part 1065, subpart J, including any other relevant parameters electronically sensed, measured, calculated, or otherwise stored by the engine's onboard computer. This also includes any parameters used to modulate the emission-control system.

(5) For each engine family, identify the applicable requirements, as follows:

(i) Identify the applicable NTE thresholds.

(ii) Identify the approved NTE carve-outs under §86.1370-2007(b)(6) and §86.1370-2007(b)(7).

(iii) Identify any approved NTE deficiencies under §86.007(a)(4)(iv).

(6) Include the following summary information after you complete testing with the engine:

(i) State whether the engine meets the vehicle-pass criteria in §86.1912(f).

(ii) Identify how many engines you have tested from the applicable engine family and how many engines still need to be tested.

(iii) Identify how many engines from an engine family have passed the vehicle-pass criteria and the number that have failed the vehicle-pass criteria (see §86.1912(f)).

(iv) If possible, state the outcome of Phase 1 testing for the engine family based on the criteria in §86.1915(b).

(b) In your reports under this section, you must do all the following:

(1) Include results from all emission testing, including incomplete tests, invalid tests, and additional tests you voluntarily conduct under §86.1915(b)(2).

(2) Include results of testing or evaluations designed to determine why a vehicle failed the vehicle-pass criteria in §86.1912.

(3) Describe any instances in which the OBD system illuminated the MIL or set trouble codes. Also describe any approved actions taken to address the trouble codes or MIL.

(4) Describe the reason for invalidating, voiding, or otherwise not completing tests. Also describe the purpose of any diagnostic procedures or additional tests you voluntarily conduct.

(c) We may ask you to send us less information in your reports under this section.

(d) Send us electronic reports at ??@epa.gov using an approved information format. If you want to use a different format, send us a written request with justification.

(e) We may require you to send us more information to evaluate whether your engine family meets the requirements of this part.

§86.1925 What records must I keep?

- (a) Organize and maintain your records as described in this section. We may review your records at any time, so it is important to keep required information readily available.
- (b) Keep the following paper or electronic records of your in-use testing for five years after you complete all the testing required for an engine family:
 - (1) Keep a copy of testing plans described in §86.1908.
 - (2) Keep a copy of the reports described in §86.1920.
 - (3) Keep any additional records, including forms you create, related to any of the following:
 - (i) The procurement and vehicle-selection process described in §86.1908.
 - (ii) Pre-test maintenance and adjustments to the engine performed under §86.1910.
 - (iii) Evaluations to determine why a vehicle failed the vehicle-pass criteria described in §86.1912.
 - (4) Keep a copy of the relevant calibration results required by 40 CFR part 1065.

§86.1930 What special provisions apply in 2005 and 2006?

For calendar year 2005 and 2006, we may direct you to test engines under this subpart. In this interim period, all the provisions of this subpart apply, with the following exceptions:

- (a) We will not direct you to do the Phase 2 testing in §86.1915(c), regardless of measured emission levels.
- (b) Engines tested under this subpart must use diesel fuel specified in §86.1313-2004.
- (c) For purposes of calculating the NTE thresholds under §86.1912(a), determine the applicable NTE standards as follows:
 - (1) Any numerical NTE requirements specified in the terms of any consent decree that apply to the engine family under this subpart.
 - (2) If a numerical NTE requirement is not specified in a consent decree for the engine family, the NTE standards are 1.25 times the applicable FELs or the applicable emission standards specified in §86.004-11(a)(1) or §86.098-11(a)(1).

Appendix I to Subpart T— Sample Graphical Summary of NTE Emission Results

The following figure shows an example of a graphical summary of NTE emission results:

NTE NOx - ENGINE #4 (HHDD)

Appendix 1 -- Example
NTE Results Plot

